NOVEMBER/DECEMBER 2024

FCA41/FCS41/CCA41/CCS41 — RELATIONAL DATABASE MANAGEMENT SYSTEMS

Time : Three hours Maximum : 75 marks

SHANMUGA INDUSTRIES ARTS & SCIENCE COLLEGE LIBRARY

SECTION A — (10 × 2 = 20 marks)

Answer ALL the questions.

1. Who is a Database Administrator?
2. What is Primary key?
3. Define the term -Integrity in Database.
4. Mention any two Aggregate functions in SQL.
5. Specify any two pitfalls in Relational database design.
6. Define the term-Normalization.
7. What is Data dictionary storage?
8. Define the term-Tertiary storage.
9. What is meant by Selection operation in Query processing?
10. Define Transaction.

SECTION B — (5 × 5 = 25 marks)

Answer ALL the questions.

11. (a) Discuss on View of data and Database languages.

Or

(b) Describe the history and purpose of Database systems.

12. (a) Explain the basics of Embedded and Dynamic SQL.

Or

(b) Discuss on the method of Modification of Database in SQL.

13. (a) Describe the concept of Functional dependencies with an example.

Or

(b) Explain the Fourth and Fifth Normal forms.

14. (a) Discuss on the organization of RAID.

Or

(b) Describe the File organization and organization of records in Files.

15. (a) Explain the process of Deadlock handling.

Or

(b) Discuss on Log-based Recovery in Recovery system.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. What is an Entity? Explain Entity relationship modelling in detail.

17. Describe the basic structure of SQL Queries with example.

18. Discuss on the First, Second and Third Normal forms with examples.

19. Explain the organization and functions of Disks.

20. Describe the Lock-based Protocols in Concurrency control.

———————